Understanding the Watcher Role: Responsibilities and Best Practices

By Nitzan Mordechai

What is a Watcher?

A watcher is a team member who monitors **weekly RADOS tests,** on main branch, run by QE and Teuthology to:

- Ensure progress.
- Identify issues in test results.
- Take corrective actions if needed.

Why this Role Matters:

- Improves accountability
- Ensures smoother workflows
- Acts as a safeguard to catch potential issues early

Who this is For:

- Team members **volunteering** to take on this responsibility.

Using the Weekly Report

Purpose of the Weekly Report

- Provides a **centralized view** of RADOS test outcomes.
- Tracks **failures, and blockers**.
- Highlights areas requiring immediate attention or escalation.

How to Use the Weekly Report

1. **Review All Test Results**
    - Look for **failed tests** and identify trends (e.g., repeating issues).
    - Focus on high-priority or critical paths.
2. **Analyze Blockers**
    - Identify any unresolved blockers from previous weeks.
    - Verify whether they've been escalated or require further action.
3. **Track Progress**
    - Check that trackers are not left unhandled

What to Look For

- **Recurrent Test Failures**
  Repeated issues that could indicate bugs or instability.
- **Environment Issues**
  Problems with Teuthology, such as infrastructure instability or misconfigurations.

Next Steps for Watchers

- Update trackers if needed (Priority)
- Share critical findings during team meetings.
- Propose actions for unresolved issues or risks.

watcher@teuthology.com Tue, Jan 21, 2:27 PM (2 days ago)

to me

Directories scanned for version: reef\default
/a/yuriw-2025-01-14_16:14:11-rados-wip-yuri6-testing-2025-01-13-1111-reef-distro-default-smithi
/a/yuriw-2025-01-15_17:02:00-rados-wip-yuri6-testing-2025-01-13-1111-reef-distro-default-smithi

Top 10 Failure Reasons:

1: https://tracker.ceph.com/issues/69067 'DevicePath': 16 occurrences

2: Command failed on smithi000 with status 1: "sudo TESTDIR=/home/ubuntu/cephtest bash -c 'ceph_test_cls_rbd --gtest_filter=-TestClsRbd.get_features:TestClsRbd.parents:TestClsRbd.mirror'": 7 occurrences

3: https://tracker.ceph.com/issues/67860 Command failed on smithi000 with status 1: 'yes | sudo mkfs.xfs -f -i size=2048 -f /dev/vg_nvme/lv_2': 5 occurrences

4: https://tracker.ceph.com/issues/56419 Command failed (workunit test cephadm/test_cephadm.sh) on smithi000 with status 1: 'mkdir -p -- /home/ubuntu/cephtest/mnt.0/client.0/tmp && cd -- /home/ubuntu/cephtest/mnt.0/client.0/tmp && CEPH_CLI_TEST_DUP_COMMAND=1 CEPH_REF=XXXXXXXXXXXXXXXXXX TESTDIR="/home/ubuntu/cephtest" CEPH_ARGS="--cluster ceph" CEPH_ID="0" PATH=$PATH:/usr/sbin CEPH_BASE=/home/ubuntu/cephtest/clone.client.0 CEPH_ROOT=/home/ubuntu/cephtest/clone.client.0 CEPH_MNT=/home/ubuntu/cephtest/mnt.0 adjust-ulimits ceph-coverage /home/ubuntu/cephtest/archive/coverage timeout 3h /home/ubuntu/cephtest/clone.client.0/qa/workunits/cephadm/test_cephadm.sh': 5 occurrences

5: Command failed (workunit test mon/mkfs.sh) on smithi000 with status 1: 'mkdir -p -- /home/ubuntu/cephtest/mnt.0/client.0/tmp && cd -- /home/ubuntu/cephtest/mnt.0/client.0/tmp && CEPH_CLI_TEST_DUP_COMMAND=1 CEPH_REF=XXXXXXXXXXXXXXXXXX TESTDIR="/home/ubuntu/cephtest" CEPH_ARGS="--cluster ceph" CEPH_ID="0" PATH=$PATH:/usr/sbin CEPH_BASE=/home/ubuntu/cephtest/clone.client.0 CEPH_ROOT=/home/ubuntu/cephtest/clone.client.0 CEPH_MNT=/home/ubuntu/cephtest/mnt.0 adjust-ulimits ceph-coverage /home/ubuntu/cephtest/archive/coverage timeout 3h /home/ubuntu/cephtest/clone.client.0/qa/standalone/mon/mkfs.sh': 4 occurrences

6: https://tracker.ceph.com/issues/16803 reached maximum tries (50) after waiting for 300 seconds: 2 occurrences

7: Command failed (workunit test osd/pg-split-merge.sh) on smithi000 with status 1: 'mkdir -p -- /home/ubuntu/cephtest/mnt.0/client.0/tmp && cd -- /home/ubuntu/cephtest/mnt.0/client.0/tmp && CEPH_CLI_TEST_DUP_COMMAND=1 CEPH_REF=XXXXXXXXXXXXXXXXXX TESTDIR="/home/ubuntu/cephtest" CEPH_ARGS="--cluster ceph" CEPH_ID="0" PATH=$PATH:/usr/sbin CEPH_BASE=/home/ubuntu/cephtest/clone.client.0 CEPH_ROOT=/home/ubuntu/cephtest/clone.client.0 CEPH_MNT=/home/ubuntu/cephtest/mnt.0 adjust-ulimits ceph-coverage /home/ubuntu/cephtest/archive/coverage timeout 3h /home/ubuntu/cephtest/clone.client.0/qa/standalone/osd/pg-split-merge.sh': 2 occurrences

8: b'2025-01-15T02:57:00.482 DEBUG:teuthology.exit:Finished running handlers': 1 occurrences

9: https://tracker.ceph.com/issues/40119 Command failed (workunit test rados/test.sh) on smithi000 with status 1: 'mkdir -p -- /home/ubuntu/cephtest/mnt.0/client.0/tmp && cd -- /home/ubuntu/cephtest/mnt.0/client.0/tmp && CEPH_CLI_TEST_DUP_COMMAND=1 CEPH_REF=XXXXXXXXXXXXXXXXXX TESTDIR="/home/ubuntu/cephtest" CEPH_ARGS="--cluster ceph" CEPH_ID="0" PATH=$PATH:/usr/sbin CEPH_BASE=/home/ubuntu/cephtest/clone.client.0 CEPH_ROOT=/home/ubuntu/cephtest/clone.client.0 CEPH_MNT=/home/ubuntu/cephtest/mnt.0 ALLOW_TIMEOUTS=1 adjust-ulimits ceph-coverage /home/ubuntu/cephtest/archive/coverage timeout 6h /home/ubuntu/cephtest/clone.client.0/qa/workunits/rados/test.sh': 1 occurrences

10: "2025-01-15T17:46:00.583074+0000 osd.6 (osd.6) 8 : cluster [WRN] osd.6 ep: 228 scrubber::ReplicaReservations pg[12.6]: timeout on replica reservations (since 2025-01-15 17:45:55)" in cluster log: 1 occurrences

```
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```

1. We will first check the version and flavor that the report lists.
2. We also seeing the directories of the tests that were collected during the report scan.

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Tracking Failures Effectively

- **Failure Details**
  - Each failure may include a **link to the tracker** related to it.
    - Note: Since this is scanned trackers, the link may not always be accurate or relevant.
  - You'll also see:
    - The **error** detected by Teuthology.
    - The **number of occurrences** for that failure.
- **Updating Trackers**
  - If you find that the tracker is **unrelated** to the error text or is **missing**, please inform us.
    - Provide the correct tracker so we can update the script for future runs.
- **Resource Impact Example**
  - Imagine failure #1 occurred **16 times**.
    - Each run used **2 target nodes**, ran for **30 minutes**, and failed.
    - This results in **16 machine hours** wasted on a known issue.

Failure Monitoring and Communication

1. Check Each Failure
    - Ensure the tracker assigned to each failure is correct.
    - For our case (monitoring the main branch), confirm the tag “main-failures” is properly set in the tracker.
2. Prioritize Issues
    - Identify if any of the issues require immediate attention.
    - Repeated issues should also be flagged for urgent investigation.
3. Communication Protocol
    - Reach out to the assignee or any team member for additional details about specific failures.
    - If a new issue appears, communicate it promptly to the team.
        - Likely, something recent has caused it.
        - The sooner it is addressed, the easier it will be to identify and resolve the root cause.

Tips for Success

- **Stay Consistent**
  - Review reports weekly to stay on top of issues.
- **Ask for Help**
  - Reach out to Me, the team, or other watchers when needed.
- **Focus on the Bigger Picture**
  - Avoid micromanaging; focus on trends and high-priority areas.

Any other questions?